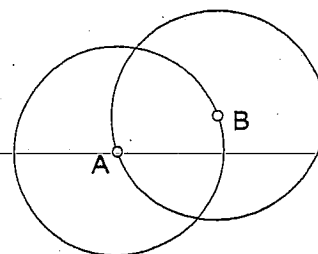


Daisy Designs

Name(s): _____

A daisy design is a simple design that you can create using only a compass. From the basic daisy, you can create more complex designs based on the regular hexagon.

1. Construct circle AB (a circle with center A and radius point B).
2. Construct circle BA . Be sure you start your circle with the cursor positioned at point B and that you finish your circle with the cursor positioned at point A .

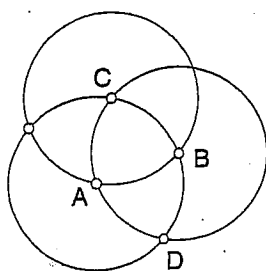


If both circles are not controlled by just points A and B , undo and try again.

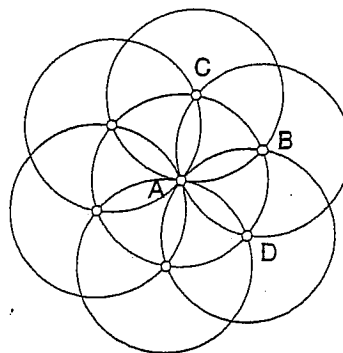
3. Drag point A and point B to confirm that both circles are controlled by these two points.
4. Construct point C and point D , the two points of intersection of these circles.

Be sure all the circles are connected by constructing them from intersections to existing points in the sketch. Your final daisy should have exactly seven points.

5. Construct a circle from point C to point A .
6. Continue constructing circles from new intersection points to point A . All these circles should have equal radii. The last circle you construct should be centered at point D . When you're done, your sketch should look like the figure below right. You should be able to drag it without making it fall apart.



Step 5



Step 6

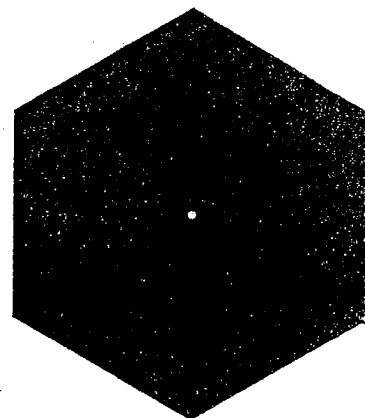
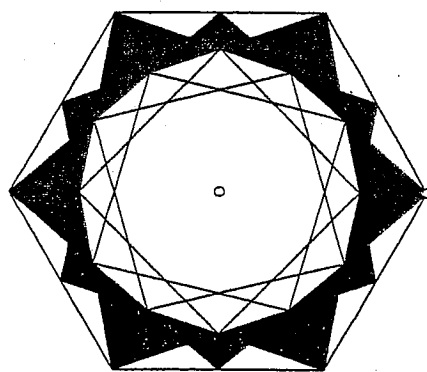
7. Use the **Segment** tool to add some lines to your design; then drag point B and observe the way your design changes.

The six points of your daisy (besides point A) define six vertices of a regular hexagon. You can use these points as the basis for hexagon or star designs like those shown on the next page.

You could construct polygon interiors and experiment with color. You could also construct arcs (select a circle and two points on it) and arc sector and arc segment interiors (select an arc). However, you can

Daisy Designs (continued)

probably get better results by printing out the basic line design and adding color and shading by hand. Once you have all the lines and polygon interiors you want, you can hide unneeded points. Don't hide your original two points, though, because you can use these points to manipulate your figure.



For tips on making and using custom tools, choose **Toolbox** from the Help menu, then click on the Custom Tools link.

Explore More

- 1. Use the daisy construction to create a custom tool for a regular hexagon. Save the new tool in the Tool Folder (next to the application itself on your hard drive) so it can be used in any open sketch.